

Clearwater Region

The Clearwater Region maintained the highest pack total of all IDFG Regions, with 24 documented resident and 6 (two tallied for Idaho and four for Montana) documented border packs (Figure 7; Table 3). The non-radiocollared Magruder pack was removed from the list of documented packs due to lack of evidence of pack persistence in that area over the past 2 years. Nineteen reproductive packs, including Idaho's Bitterroot Range and Fish Creek border packs, produced 72 pups; seventeen of these qualified as breeding pairs. Fourteen documented wolf mortalities were recorded: five from other human causes, four from unknown causes, three from control, and two from natural causes. Livestock losses from wolf depredation in the Clearwater Region during 2007, as verified by WS, included 1 confirmed and 2 probable cattle killed. Sixteen wolves were captured (1 Selway pack pup was caught twice) in this region and 12 were fitted with radiocollars.

Law Enforcement Summary

Conservation Officers, in consultation with USFWS Special Agents, investigated 11 incidents involving wolf mortalities in the Clearwater Region. In 4 cases the cause of death was unknown, 2 wolves were legally killed, 2 deaths were verified or suspected illegal kills, 2 mortalities were attributed to other human causes, and one was deemed a natural death.

Documented Resident Packs

Battle Ridge

Biologists verified a rendezvous site and counted 2 pups (1 gray, 1 black) along with 1 black adult. A trapping effort was initiated, but was cut short due to fire danger, and further capture efforts were not possible due to fire closures. This first-year pack remains uncollared and had a minimum of 4 wolves (2 black, 1 gray, 1 unknown) and counted as a breeding pair for 2007.

Bimerick Meadow

Suspected breeding male B247 was not located after the May monitoring flight and his status since was unknown. Radio locations from female B289 led to the discovery of a rendezvous site where 4 gray pups were observed in mid-June. Minimum pack size, based upon aerial and field observations, was estimated at 7 wolves. This pack was a breeding pair for the third consecutive year.

Chesimia

After lethal control removed the alpha female and 3 other wolves in 2005, this pack did not display denning behavior in 2007 based upon telemetry locations of sole radiocollared wolf, 2-year-old female B222. In addition, the livestock operator in this pack's territory noted significantly less evidence of wolves in 2007 near her field camp, which was near the 2005 den site, and in the area in general, although in September she reported wolves harassing her herding dogs. By the end of 2007, B222 was located within traditional Chesimia pack territory, but it was unknown how many wolves were present in this pack. The Chesimia pack was not considered a breeding pair for 2007.

Cold Springs

Following the death of the alpha female, B206, in October 2005, there were no radiocollared individuals in this pack. Tracks of 2-3 individuals were located in late winter 2006/2007 in the

Race Creek drainage, but investigations of areas previously used by this pack failed to detect further presence. The Cold Springs pack was not considered a breeding pair for 2007.

Coolwater Ridge

Multiple pups were heard howling in early August, but no visual pup count was obtained. Two subadult males, B344 and B346, were captured and radiocollared to retain telemetry contact with the pack; suspected alpha female B163's radiocollar was believed to have expired. A minimum of 6 wolves including 2 pups was detected in this pack based on field efforts. The Coolwater Ridge pack was a breeding pair in 2007.

Deception

Female B213, captured and radiocollared as a member of the Five Lakes Butte pack in 2004, was last located in that territory in September 2005. She was not detected again until January 2006, at which time she was located in the Kelly Creek drainage. She subsequently was located north of Lolo Pass before returning to the area adjacent to the southern edge of the Five Lakes Butte pack's territory, along the North Fork Clearwater River. Aerial telemetry locations during spring 2007 suggested B213 might have localized at a potential den site. Field investigations in mid-August led to detection of a rendezvous site where 4 gray pups were observed. A trapping effort resulted in the capture of 3 pups, one of which (female B352) was radiocollared, and the alpha male (B354) that was also radiocollared. B213's signal was detected on mortality mode during a monitoring flight in early December; her radio signal was located in the North Fork Clearwater River and it was believed that she was dead. Pack size at the end of the year was enumerated at 5 individuals. This first-year pack was not a breeding pair for 2007 because only a single adult remained.

Eagle Mountain

Two radiocollared wolves, suspected alpha male B136 and adult female B295, assisted biologists in locating this pack's den site in the Selway-Bitterroot Wilderness where 3 pups (1 black, 2 gray) were observed. Pack size for 2007 was estimated at a minimum of 8 wolves, based upon ground and aerial observations. This pack was a breeding pair for 2007.

Earthquake Basin

Radio tracking of wolves B274 and B275 led biologists to a den site where 2 black and 6 gray pups were observed, which equaled the Monumental Creek pack as the largest litters recorded for 2007. An uncollared pack member was killed in a vehicle collision in May. Based upon field observations, this pack was estimated to contain a minimum of 10 wolves. The Earthquake Basin pack was a 2007 breeding pair.

Eldorado Creek

Radio tracking of adult male B281 and possible alpha female B301 led a biologist to a rendezvous site where 4 gray pups were observed. Field observations indicated a minimum of 6 wolves in this pack. The Eldorado Creek pack was a breeding pair for 2007.

Florence

Males B200 and B201, captured in 2004, continued their membership with the pack. A den site area was investigated in May, at which time 7 gray pups were documented. Based upon field observations, a minimum of 10 wolves was present, similar to aerial sightings in both 2004 and 2005. Two wolves in this pack's territory were inadvertently killed during coyote lethal control efforts. Breeding pair status was attained by the Florence pack for 2007.

Giant Cedar

Localized aerial and ground locations during spring of radiocollared wolves B256 (adult) and B308 (yearling) indicated a probable den site. A litter of 5 gray pups was observed at a rendezvous site in mid-July. Two uncollared adult-sized wolves were also observed at that time. Pack size was estimated at a minimum of 6 individuals. B307, a pup captured in 2006, was found dead in April near Bovill, Idaho; necropsy revealed a deformed spine, so cause of death was determined as natural. The Giant Cedar pack was a breeding pair in 2007.

Gospel Hump

Contact with both radiocollared wolves, females B138 and B139, was lost during 2004, making monitoring of this pack difficult. A USFS trail crew reported persistent howling and tracks near the traditional den site in 2006, but no reports were received of wolf activity in this pack's home range and there was no field effort made to locate the pack during 2007. The status of this pack was unknown at the end of the year. The Gospel Hump pack was not reported as a breeding pair in 2007 and there was no estimate of pack size.

Hemlock Ridge

This pack produced its fifth documented litter in 2007. Based upon howling, a minimum of 2 pups was detected. At least 5 adults were accounted for based upon radiocollared animals and howling, which resulted in a minimum pack size estimate of 7 wolves for 2007. In addition to existing radiocollared wolves B207 and B210, another 2 adult wolves B329 (male) and B330 (female), were radiocollared in 2007. The Hemlock Ridge pack was a 2007 breeding pair.

Indian Creek

Five wolves were observed during an IDFG winter ungulate survey in 2004. In 2007, biologists documented tracks of at least 2 wolves and observed 1 black wolf in this area. One natural mortality of an uncollared wolf occurred in this pack's territory. This fourth-year pack did not count as a breeding pair for 2007.

Kelly Creek

Suspected alpha male B220 and female B237 were present at a rendezvous site in early August. One gray pup and 4 gray adult-sized wolves, including B220, were observed. B220's radio signal was detected on mortality mode during a November monitoring flight; the carcass was recovered in early December and will be necropsied to determine cause of death. Pack size, derived from ground efforts, was estimated at 5 wolves. The longstanding Kelly Creek pack was not a breeding pair in 2007 because just a single pup was detected.

Lochsa

Female wolf B232, the sole radiocollared member of this pack, was not located after December 2006, but biologists were able to locate a rendezvous site in early August, where 4 gray pups were observed. One pup, B345, was captured and radiocollared. Two to 3 adults were heard howling, so pack size was estimated at a minimum of 6 individuals in 2007. B345 was aerielly located in November approximately 25 miles (40 km) southwest of the rendezvous site; it was unknown whether other pack members were present at this time or if this was a dispersal movement. The Lochsa pack was a breeding pair for 2007.

Magruder

Suspected alpha male B110 has not been located since June 2004, probably due to expiration of his radiocollar, and female B219 not since late May 2005. One effort to investigate this pack's

previously used rendezvous sites was made, but it was hindered by wildfire-related closures, and little wolf sign was found. Status of this pack has been unknown for the past 2 years. Due to this lack of information, the Magruder pack was no longer considered a documented pack by the end of 2007.

O'Hara Point

This pack did not use their traditional denning area for the second consecutive year in 2007, complicating efforts to document reproduction and conduct capture operations. Tracks from at least 3 wolves, possibly including a pup(s), were located within this pack's territory, suggesting that a litter may have been produced; however, no additional evidence was collected to verify this. The O'Hara Point pack was not a breeding pair in 2007 because reproduction was not verified.

Pettibone Creek

Five wolves were observed during an IDFG winter ungulate survey in 2004. In 2007, biologists verified a rendezvous site with at least 2 pups (based on pup tracks and scats) and 2 adults (based on howling), resulting in a minimum pack size estimate of 4 wolves. Due to fire danger, biologists were evacuated from the area the day after the rendezvous site was discovered, thus traps were not set. Biologists could not access the area again that season due to fire closures. This fourth-year pack was counted as a breeding pair for 2007.

Pilot Rock

In late July, WS captured and radiocollared an adult female wolf, B342, and killed another in this pack's territory after 1 domestic calf was confirmed killed. In mid-August, while attempting to track B342, a biologist opportunistically observed a wolf pup cross the road in front of his vehicle. He was able to elicit a howling response from 4 pups at that time. The following day, 2 pups were observed (1 black, 1 gray). A second field effort resulted in a visual of 2 gray pups and estimated a minimum of 2-3 adult-sized wolves based upon howling. Minimum pack size was estimated at 6 wolves. This newly documented pack qualified as a breeding pair for 2007.

Pot Mountain

Five wolves were observed on a slope of Pot Mountain during a winter ungulate survey conducted by IDFG in spring 2005, so this group was added as a documented pack for 2005. No field effort was conducted in this area during 2007. No estimate of pack size was available and this pack was not a 2007 breeding pair.

Red River

In early February, a coyote trapper inadvertently captured a black wolf near Elk City, Idaho. Before Program personnel could reach the scene to radiocollar the animal, it suffered a broken leg; the wolf was radiocollared (male B318) and released despite its injury. Subsequent aerial telemetry indicated that the wolf was sufficiently mobile enough to travel throughout the pack's territory. Ground-tracking of B318 in early June led biologists to a rendezvous site where 3-4 pups were heard howling. From ground efforts, minimum pack size was estimated at 5 individuals. The Red River pack was considered a breeding pair for 2007.

Selway

One of the first packs to form in Idaho following the 1995 translocations from Canada, the Selway pack was returned to active monitoring status with the capture and radiocollaring of 2 pups in 2007. Investigation of a traditional rendezvous site in August led to the detection of the

pack and the successful capture effort. Six black pups and 1 gray pup were observed, as well as 2 black adult-sized wolves; this pack had been composed solely of black wolves in the past. During a September monitoring flight, 13 black and 2 gray (1 adult, 1 pup) wolves were observed. The Selway pack was a breeding pair in 2007 and received its first radiocollared members (male pup B355 [captured twice] and female pup B356) since founding wolf B5's death in 2004.

Spirit Ridge

This newly documented pack was fortuitously located while a capture operation was underway for the neighboring Coolwater Ridge pack. Subadult female B339 was trapped and radiocollared in July; B339 is gray and all previously known individuals in the Coolwater Ridge pack were black, creating suspicion about this wolf's pack membership. A rendezvous site was located where 2 gray adult-sized wolves were observed and a third was heard howling, and a minimum of 4 pups was detected from howling (2 gray pups were seen). Minimum pack size was estimated to be 7 wolves. The Spirit Ridge pack qualified as a breeding pair for 2007.

White Bird Creek

Alpha female B284 was legally killed while the pack was harassing cattle in early April; she was pregnant and her death was believed to preclude this pack from reproducing in 2007. The remaining radiocollared wolf, male B285, was ground-tracked in late August and was seemingly alone both days he was observed. One domestic calf, probably killed by wolves, was attributed to this pack. A gray wolf was found dead in this pack's territory in early December; it was recorded as a mortality for this pack, although circumstances of its death suggested it may have been a dispersing wolf from another pack. Pack size was estimated at 4 wolves. The White Bird Creek pack was not considered a breeding pair in 2007.

Documented Border Packs

Big Hole (MT)

This documented border pack was tallied for Montana for 2007. See the respective State's annual report for information on this pack. One adult wolf died in Idaho as a result of capture-related activities.

Bitterroot Range (ID)

This documented border pack was tallied for Idaho in 2007. This newly documented and uncollared pack was located by MTFWP personnel in the Goose Creek drainage on the Idaho side of the Idaho/Montana border southeast of Hoodoo Pass. Three gray adults and 2 gray pups were observed, making this pack an Idaho breeding pair for 2007.

Brooks Creek (MT)

This documented border pack was tallied for Montana for 2007. See the respective State's annual report for information on this pack.

Fish Creek (ID)

This documented border pack was tallied for Idaho in 2007. The Fish Creek pack denned in Idaho for the second consecutive year in 2007. Ground-tracking of radiocollared wolves B235 (suspected alpha female) and B236 (adult male) in the Kelly Creek drainage led to the discovery of a rendezvous site where 4 pups (3 gray, 1 possibly black) and 7-8 adults were observed. Approximately 1 week later, an aerial observation by MTFWP substantiated the pup count. This

9-member border pack, based upon a December aerial observation, was considered an Idaho breeding pair for 2007.

Lake Como (MT)

This documented border pack was tallied for Montana for 2007. See the respective State's annual report for information on this pack.

Trapper Peak (MT)

This documented border pack was tallied for Montana for 2007. See the respective State's annual report for information on this pack.

Suspected Resident Packs

Grandad

During 2006, a survey/trapping effort during the latter half of August detected 4 sets of wolf tracks and 1 wolf was temporarily captured, but managed to pull free from the trap. In July 2007, investigation of this area yielded 1 set of wolf tracks. A report was received from mid-September that indicated a possible location of a rendezvous site and 2 gray wolves were reportedly observed there. This site will be searched next year to determine this pack's status, and to possibly conduct capture efforts.

Tahoe

Female B320 was captured in May during a control action initiated by WS where 1 domestic calf was probably killed and 2 others were confirmed injured by wolves. B320 was aerially monitored until August, at which time her signal was detected on mortality mode. Her remains were recovered and an investigation was undertaken by USFWS Law Enforcement. Local residents reported observing 5 wolves in February, though ground efforts following B320's death were unable to document presence or wolf sign in the areas she had frequented. Further efforts to determine wolf pack status in this area will be made in 2008.

Suspected Border Packs

Watchtower Creek (MT)

This suspected border pack was tallied for Montana for 2007. See the respective State's annual report for information on this pack.

Other Documented Wolf Groups

Roaring Lion (ID)

Biologists verified at least 2 wolves in this group based on track evidence. Multiple trapping efforts were unsuccessful.

Saturday

Biologists verified at least 2 wolves in this group based on track evidence. Trapping efforts were unsuccessful.

WC7

On 31 October 2006, male wolf WC7 was captured near Nanton, Canada (approximately 58 miles [94 km] south of Calgary, Alberta), and fitted with a GPS radiocollar. This wolf emigrated

to the U.S. on 31 March 2007 (first location south of the international border). Satellite locations provided by Alberta Sustainable Resource Development indicated the wolf generally followed the Flathead River to Flathead Lake before making its way along the Clark Fork River in late April. It first was located in Idaho on 9 May 2007, north of Lookout Pass. Since 26 May 2007 it roamed an area encompassed by the towns of Santa, Elk River, and De Smet, Idaho, suggesting that it may have settled into a home range. Ground and aerial searches failed to detect this wolf's radio signal, thwarting efforts to ascertain whether WC7 was affiliated with other wolves. The GPS radiocollar was scheduled to automatically detach from around the wolf's neck at the end of October, but widely scattered fixes were obtained until late November that indicated the radiocollar may not have functioned as programmed. No further GPS fixes were obtained, suggesting the radiocollar expired or was otherwise no longer able to communicate with tracking satellites.

Monitoring Wolves in the Selway-Bitterroot Wilderness

Due to difficulty in monitoring wolves in the wilderness areas of central Idaho, IDFG began intensively pursuing wolf capture efforts in the Selway-Bitterroot Wilderness Area in 2007 in addition to ongoing efforts being conducted by the NPT. Initially, the IDFG requested permission from the USFS to helicopter-dart wolves in the Wilderness Area incidental to big game winter monitoring. Due to expense of conducting a National Environmental Policy Act analysis for landing in the wilderness, IDFG and the USFS instead provided matching funds and cooperated in an increased ground monitoring effort.

The main goal of the project was to capture and radiocollar wolves in the Selway-Bitterroot Wilderness. The IDFG crews were unable to capture a wolf during the first summer of this project. However, they did document 2 breeding pairs, 2 other wolf groups, and 1 suspected pack (Table 3). This information will be used to focus capture efforts in 2008. Nez Perce Tribe crews were able to capture 2 uncollared wolf packs adjacent to the Wilderness Area. These packs will likely use the Wilderness Area for at least part of each year. Two other packs (Eagle Mountain and Coolwater Ridge) continued to be monitored via radiocollars.





In addition to trapping attempts, the IDFG surveyed 575 miles of trails for wolf sign. The IDFG collected Global Positioning System (GPS) locations of wolf and elk sign along these trails and are using that dataset to test and further develop a model that predicts areas of high wolf use. Being able to accurately predict areas of high wolf use will be an important aspect of the standardized monitoring protocols.

Currently, there are 10 known or suspected groups of wolves that use the Selway-Bitterroot Wilderness Area for all or part of each year: the radiocollared, documented Coolwater Ridge, Eagle Mountain, Selway, and Spirit Ridge packs; the uncollared documented Battle Ridge, Indian Creek, and Pettibone Creek packs; the uncollared suspected Watchtower Creek pack; and 2 other wolf groups (Roaring Lion, Saturday) without radiocollared members. Six of the radiocollared and documented resident packs qualified as breeding pairs for 2007 (Table 3).

2007 Clearwater Region Wolf Activity Telemetry, Documented and Suspected Locations

Telemetry, Documented and Suspected Locations

2007 Public Observations ***

-  Documented Pack
-  Documented Group (Pair or Group less than 4 animals)
-  Suspected Pack
-  Terminated Group

- ✚ Multiple Wolves Observed
- ✚ Single Wolf Sighted
- ✕ Not Specified



* Telemetry data and research locations collected and analyzed by Idaho Department of Fish and Game, the Nez Perce Tribe, Montana Department of Fish, Wildlife and Parks, Wildlife Services and the National Park Service. Pack locations are minimum convex polygons of telemetry and research observations for radiocollared wolves from 1/1/2006 - 12/31/2007 with outliers removed. Packs which did not exist in 2007 are excluded. This map is provided for management purposes and should not be used for data analysis. Do not release these data to third parties without first contacting the Idaho Department of Fish and Game or the Nez Perce Tribe.

** Estimated Pack Activity determined by biologists from research locations, public observations and incidental observations from 1/1/2006 - 12/31/2007.

*** Public Observations from 1/1/2007 - 12/31/2007 collected on the Idaho Fish and Game website and reviewed by staff biologists.

Figure 7. Wolf pack activity and observations in the Clearwater Region, 2007.

Table 3. Minimum number of wolves detected, reproductive status, mortality, dispersal, monitoring status, and livestock depredation for documented and suspected wolf packs and other wolf groups within Idaho Department of Fish and Game Clearwater Region, 2007.

Wolf group ^a	Min. no. wolves detected ^b	Reproductive status			Documented mortalities				Known dispersal	Monitoring status			Confirmed & (probable) wolf-caused livestock losses		
		Min. no. pups prod. (died) ^c	Reported as		Natural	Control ^e	Other human ^f	Unknwn ^g		Active radio collars	No. wolf captures ^h	No. wolves missing ⁱ	Cattle	Sheep	Dogs
			reprod. pack	breeding pair ^d											
DOCUMENTED PACK															
Battle Ridge	4	2	YES	YES	0	0	0	0	0	0	0	0	0	0	0
Big Hole (MT) ^j							1								
Bimerick Meadow	7	4	YES	YES	0	0	0	0	0	1	0	1	0	0	0
Bitterroot Rge (ID) ^j	5	2	YES	YES	0	0	0	0	0	0	0	0	0	0	0
Brooks Crk (MT) ^j															
Chesimia	?	?	NO	NO	0	0	0	0	0	1	0	0	0	0	0
Cold Springs	2	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Coolwater Ridge	6	2	YES	YES	0	0	0	0	0	2	2	0	0	0	0
Deception	5	4	YES	NO	0	0	0	1	0	2	4	0	0	0	0
Eagle Mountain	8	3	YES	YES	0	0	0	0	0	2	0	0	0	0	0
Earthquake Basin	10	8	YES	YES	0	0	1	0	0	2	0	0	0	0	0
Eldorado Creek	6	4	YES	YES	0	0	0	0	0	2	0	0	0	0	0
Fish Creek (ID) ^j	9	4	YES	YES	0	0	0	0	0	2	0	0	0	0	0
Florence	10	7	YES	YES	0	0	2	0	0	2	0	0	0	0	0
Giant Cedar	6	5	YES	YES	1	0	0	0	0	2	0	0	0	0	0
Gospel Hump	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Hemlock Ridge	7	2	YES	YES	0	0	0	0	0	4	2	0	0	0	0
Indian Creek	2	?	NO	NO	1	0	0	0	0	0	0	0	0	0	0
Kelly Creek	5	1	YES	NO	0	0	0	1	0	1	0	0	0	0	0
Lake Como (MT) ^j															
Lochsa	6	4	YES	YES	0	0	0	0	0	1	1	1	0	0	0
Magruder ^k															
O'Hara Point	3	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Pettibone	4	2	YES	YES	0	0	0	0	0	0	0	0	0	0	0
Pilot Rock	6	4	YES	YES	0	1	0	0	0	1	1	0	1	0	0
Pot Mountain	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Red River	5	3	YES	YES	0	0	0	0	0	1	1	0	0	0	0
Selway	15	7	YES	YES	0	0	0	0	0	2	3	0	0	0	0
Spirit Ridge	7	4	YES	YES	0	0	0	0	0	1	1	0	0	0	0
Trapper Peak (MT) ^j															
White Bird Creek	4	0	NO	NO	0	1	0	1	0	1	0	0	(1)	0	0
SUBTOTAL	142	72			2	2	4	3	0	30	15	2	1(1)	0	0

Table 3. Continued.

Wolf group ^a	Min. no. wolves detected ^b	Reproductive status			Documented mortalities				Known dispersal	Monitoring status			Confirmed & (probable) wolf-caused livestock losses		
		Min. no. pups prod. (died) ^c	Reported as		Natural	Control ^e	Other human ^f	Unknwn ^g		Active radio collars	No. wolf captures ^h	No. wolves missing ⁱ	Cattle	Sheep	Dogs
			reprod. pack	breeding pair ^d											
SUSPECTED PACK															
Grandad	1				0	0	0	0	0	0	0	0	0	0	0
Tahoe	?				0	0	0	1	0	0	1	0	(1)	0	0
Watchtower Crk (MT) ^j															
SUBTOTAL	1	0			0	0	0	1	0	0	1	0	(1)	0	0
OTHER DOCUMENTED GROUP															
Roaring Lion (ID) ^j	2				0	0	0	0	0	0	0	0	0	0	0
Saturday	2				0	0	0	0	0	0	0	0	0	0	0
WC7	1				0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	5	0			0	0	0	0	0	0	0	0	0	0	0
UNKNOWN															
	?				0	1	1	0	0	0	0	0	0	0	0
SUBTOTAL	0				0	1	1	0	0	0	0	0	0	0	0
REGIONAL TOTAL	148	72			2	3	5	4	0	30	16	2	1(2)	0	0

^a Documented pack = territorial groups of wolves usually consisting of an adult male and female and their offspring from one or more generations, and has the potential to reproduce (2 adults of opposite sex). Suspected pack = geographic areas where wolf pack presence was suspected but not verified, or where wolf presence was verified but did not meet documented pack status. Other documented group = verified groups not meeting either documented or suspected pack status (e.g., lone wolves, potential mated pairs, etc.). Unknown = geographic areas where wolf presence was previously unverified and/or no data on group status was known.

^b Summing this column does not equate to number of wolves estimated to be present in the population.

^c Number in parentheses indicates known pup mortality; pup mortalities tallied in the appropriate column in DOCUMENTED MORTALITIES.

^d Breeding pairs are the measure of Federal and State wolf recovery and management goals. A breeding pair is defined as “an adult male and a female wolf that have produced at least 2 pups that survive until December 31 of the year of their birth...”.

^e Includes agency lethal control and legal take.

^f Includes all other human-related deaths.

^g Does not include pups that disappeared before winter.

^h Includes wolves captured for monitoring purposes during 2007. Most, but not all, were radiocollared.

ⁱ Radiocollared wolves that became missing in 2007.

^j Border pack officially tallied to (STATE); territory known/likely shared with Idaho. Data on these packs can be found in Rocky Mountain Wolf Recovery 2007 Annual Report; data for mortalities and/or depredations by non-Idaho border packs that occurred within Idaho are presented here.

^k Group no longer considered extant due to agency lethal removal, lack of verified evidence for the preceding 2 years, or other cause.